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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,671	04/07/2005	Kazuhiko Sugiyama	040478	5308
23850 7590 09/21/2007 KRATZ, QUINTOS & HANSON, LLP 1420 K Street, N.W. Suite 400 WASHINGTON, DC 20005			EXAMINER KEE, FANNIE C	
			ART UNIT 3679	PAPER NUMBER
			MAIL DATE 09/21/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/506,671	Applicant(s) SUGIYAMA ET AL.	
	Examiner Fannie C. Kee	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2007 and 11 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-14 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-6, 8, and 14 is/are allowed.
- 6) ☒ Claim(s) 1-3, 9, 10 and 12 is/are rejected.
- 7) ☒ Claim(s) 11 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2007 and 11 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1-6 and 14 are objected to because of the following informalities: the claims need to be re-written according to rule CFR 1.75(i) – “where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation.”

Correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 2, 9/2, 10/9/2, and 12/9/2 are rejected under 35 U.S.C. 102(b) as being anticipated by Folkard GB Patent No. 745,847.

With regard to claim 2, Folkard discloses a pipe joint comprising a first 15 and a second 11 tubular joint member of synthetic resin, and screw means 10,14 for joining the joint members, the pipe joint being characterized in that the first joint member is provided with an annular recessed portion (portion on left next to 16) in an abutting end face thereof, the second joint member being provided with an annular ridge (portion on right next to 12) on an abutting end face thereof, the ridge of the second joint member being fitted in the recessed portion of the first

Art Unit: 3679

joint member, with an outer surface of the ridge in intimate contact with an inner surface of the recessed portion approximately over the entire surface areas when the pipe joint is properly tightened up, a portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion being then in intimate contact with a portion of the abutting end face of the second joint member positioned radially inwardly of the ridge approximately over the entire surface areas thereof, a portion of the abutting end face of the first joint member positioned radially outwardly of the recessed portion being then in intimate contact with a portion of the abutting end face of the second joint member positioned radially outwardly of the ridge approximately over the entire surface areas thereof,

wherein when the pipe joint is manually tightened up, a first gap is present between the portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion and the portion of the abutting end face of the second joint member positioned radially inwardly of the ridge, and a second gap greater than the first gap is present between the portion of the abutting end face of the first joint member positioned radially outwardly of the recessed portion and the portion of the abutting end face of the second joint member positioned radially outwardly of the ridge.

Note: the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation is given little patentable weight. Also, a comparison of the recited process with the prior art process does NOT serve to resolve the issue concerning patentability of the product. In re Fressman, 489 F2d 742, 180 U.S.P.Q. 324 (CCPA 1974).

Whether a product is patentable depends on whether it is known in the art or it is obvious, and is not governed by whether the process by which it is made is patentable. In re Klug, 333 F2d 905,

Art Unit: 3679

142 U.S.P.Q. 161 (CCPA 1964). In an ex parte case, product-by-process claims are not construed as being limited by the product formed by the specific process recited. In re Hirao et al., 535 F2d 67, 190 U.S.P.Q. 15, see footnote 3 (CCPA 1976).

With regard to claim 9/2, Folkard discloses each of the joint members being provided at the abutting end face thereof with a flange portion (portion on right next to 13 and portion on left next to 17), and the screw means comprises an annular male screw member 10 having a forward end face in bearing contact with the flange portion of one of the joint members, and a cap nut 14 fitted around the other joint member and having a top wall in bearing contact with the flange portion of said other joint member, the cap nut being screwed on the male screw member.

With regard to claim 10/9/2, Folkard discloses at least one of a space between the male screw member and the flange portion of said one joint member and a space between the top wall of the cap nut and the flange portion of said other joint member having disposed therein a biasing member 13,17 for biasing one of the joint members toward the other joint member.

With regard to claim 12/9/2, Folkard discloses a synthetic resin thrust ring 13 being interposed between the cap nut top wall and the flange portion of the joint member.

Art Unit: 3679

4. Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Kingsford et al U.S. Patent No. 5,645,301.

With regard to claim 3 and as seen in Figure 5A, Kingsford et al disclose a pipe joint comprising a first 140 and a second 138 tubular joint member of synthetic resin, a synthetic resin gasket 142 interposed between abutting portions of the joint members and screw means 173 for joining the joint members, the pipe joint being characterized in that each of the joint members is provided in an abutting end face thereof with an annular recessed portion 156,158 for forming a portion for accommodating the gasket therein when the joint members are butted against each other, the gasket being in intimate contact with an inner surface of the recessed portion of the first joint member approximately over the entire area thereof when the pipe joint is properly tightened up, a surface portion of the gasket exposed from the same recessed portion being then in intimate contact with an inner surface of the recessed portion of the second joint member approximately over the entire area thereof, a portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion thereof being then in intimate contact with a portion of the abutting end face of the second joint member positioned radially inwardly of the recessed portion thereof approximately over the entire surface areas thereof, a portion of the abutting end face of the first joint member positioned radially outwardly of the recessed portion thereof being then in intimate contact with a portion of the abutting end face of the second joint member positioned radially outwardly of the recessed portion thereof approximately over the entire surface areas thereof,

Art Unit: 3679

wherein when the pipe joint is manually tightened up, a first gap is present between the portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion thereof and the portion of the abutting end face of the second joint member positioned radially inwardly of the recessed portion thereof, and

a second gap greater than the first gap is present between the portion of the abutting end face of the first joint member positioned radially outwardly of the recessed portion thereof and the portion of the abutting end face of the second joint member positioned radially outwardly of the recessed portion thereof.

Note: the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation is given little patentable weight. Also, a comparison of the recited process with the prior art process does NOT serve to resolve the issue concerning patentability of the product. In re Fressman, 489 F2d 742, 180 U.S.P.Q. 324 (CCPA 1974).

*Whether a product is patentable depends on whether it is known in the art or it is obvious, and is not governed by whether the process by which it is made is patentable. In re Klug, 333 F2d 905, 142 U.S.P.Q. 161 (CCPA 1964). In an *ex parte* case, product-by-process claims are not construed as being limited by the product formed by the specific process recited. In re Hirao et al., 535 F2d 67, 190 U.S.P.Q. 15, see footnote 3 (CCPA 1976).*

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boitnott et al U.S. Patent No. 2,726,104.

With regard to claim 1, and as seen in Figure 1, Boitnott et al disclose a pipe joint comprising a first 11 and a second 10 tubular joint member, a synthetic resin gasket 16,17 interposed between abutting portions of the joint members and screw means 12 for joining the joint members, the pipe joint being characterized in that the first joint member is provided in an abutting end face thereof with an annular recessed portion 15 having an opening remaining therein with the gasket entirely fitted therein, the second joint member being provided with an annular ridge 14 on an abutting end face thereof, the ridge being fitted in the opening of the recessed portion with the gasket fitted in the recessed portion, an outer surface of the ridge of the second joint member being pressed against an inner surface of the recessed portion of the first joint member with the gasket interposed between the surfaces in intimate contact therewith approximately over the entire surface areas when the pipe joint is properly tightened up, a portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion being then in intimate contact with a portion of the abutting end face of the

Art Unit: 3679

second joint member positioned radially inwardly of the ridge approximately over the entire surface areas thereof, a portion of the abutting end face of the first joint member positioned radially outwardly of the recessed portion being then in intimate contact with a portion of the abutting end face of the second joint member positioned radially outwardly of the ridge approximately over the entire surface areas thereof,

wherein when the pipe joint is manually tightened up, a first gap is present between the portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion and the portion of the abutting end face of the second joint member positioned radially inwardly of the ridge, and a second gap greater than the first gap is present between the portion of the abutting end face of the first joint member positioned radially outwardly of the recessed portion and the portion of the abutting end face of the second joint member positioned radially outwardly of the ridge.

Note: the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation is given little patentable weight. Also, a comparison of the recited process with the prior art process does NOT serve to resolve the issue concerning patentability of the product. In re Fressman, 489 F2d 742, 180 U.S.P.Q. 324 (CCPA 1974).

Whether a product is patentable depends on whether it is known in the art or it is obvious, and is not governed by whether the process by which it is made is patentable. In re Klug, 333 F2d 905, 142 U.S.P.Q. 161 (CCPA 1964). In an exparte case, product-by-process claims are not construed as being limited by the product formed by the specific process recited. In re Hirao et al., 535 F2d 67, 190 U.S.P.Q. 15, see footnote 3 (CCPA 1976).

However, Boitnott et al do not disclose that the first and second tubular joint members are made of a synthetic resin.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have fabricated the first and second tubular joint members from synthetic resin because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

In re Leshin, 125 USPQ 416.

Allowable Subject Matter

7. Claims 11/9/2 and 13/12/9/2 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With regard to claim 11/9/2, the prior art of record does not teach or suggest an annular clearance being formed inside the cap nut around the flange portions of the joint members with an annular spacer, and a biasing member in a space between the cap nut top wall and the spacer and a space between the male screw member and the spacer in combination with the pipe joint of claims 2 and 9.

With regard to claim 13/12/9/2, the prior art of record does not teach or suggest the thrust ring having an outside diameter larger than the inside diameter of the cap nut where the cap nut

Art Unit: 3679

has an annular recess formed in an inner periphery for accommodating an outer peripheral edge of the thrust ring in combination with the pipe joint of claims 2, 9, and 12.

8. Claim 14 is allowed.

9. The following is an examiner's statement of reasons for allowance:

With regard to claim 14, the prior art of record does not teach or suggest the combination of a pipe joint with first and second tubular joint members of synthetic resin with a synthetic resin gasket interposed between the abutting portions of the joint members and screw means for joining the joint members, wherein each of the joint members is provided at the abutting end face thereof with a flange portion, and the screw means comprises an annular male screw member having a forward end face in bearing contact with the flange portion of one of the joint members, and a cap nut fitted around the other joint member and having a top wall in bearing contact with the flange portion of said other joint member, the cap nut being screwed on the male screw member and the first joint member being provided in an abutting end face thereof with an annular recessed portion having an opening remaining therein with the gasket entirely fitted therein, the second joint member being provided with an annular ridge on an abutting end face thereof, the ridge being fitted in the opening of the recessed portion with the gasket fitted in the recessed portion, an outer surface of the ridge of the second joint member being pressed against an inner surface of the recessed portion of the first joint member with the gasket interposed between the surfaces in intimate contact therewith approximately over the entire surface areas wherein when the pipe joint is properly tightened up, a portion of the abutting end face of the

Art Unit: 3679

first joint member positioned radially inwardly of the recessed portion being then in intimate contact with a portion of the abutting end face of the second joint member positioned radially inwardly of the ridge approximately over the entire surface areas thereof, a portion of the abutting end face of the first joint member positioned radially outwardly of the recessed portion being then in intimate contact with a portion of the abutting end face of the second joint member positioned radially outwardly of the ridge approximately over the entire surface areas thereof.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

10. Applicant's arguments filed 6/8/07 and 6/11/07 have been fully considered but they are not persuasive.

- a. In response to Applicant's argument that Boitnott, Folkard, and Kingsford fail to disclose the process steps defined "when the pipe joint is manually tightened up", the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation is given little patentable weight. Also, a comparison of the recited process with the prior art process does NOT serve to resolve the issue concerning patentability of the product. In re Fressman, 489 F2d 742, 180 U.S.P.Q. 324

Art Unit: 3679

(CCPA 1974). Whether a product is patentable depends on whether it is known in the art or it is obvious, and is not governed by whether the process by which it is made is patentable. In re Klug, 333 F2d 905, 142 U.S.P.Q. 161 (CCPA 1964). In an *exparte* case, product-by-process claims are not construed as being limited by the product formed by the specific process recited. In re Hirao et al., 535 F2d 67, 190 U.S.P.Q. 15, see footnote 3 (CCPA 1976).

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fannie C. Kee whose telephone number is (571) 272-1820. The examiner can normally be reached on 8:30 am to 5:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Fannie C. Kee
September 17, 2007



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